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DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

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- HUD Regional/Area Office, O.I.L.S.R., Attn: Carroll Goodwin, Executive Tower Building, 1405 Curtis St., Denver, CO 80202
- County Commissioners, Courthouse, Malta, MT 59538
- County Sheriff, Courthouse, Malta, MT 59538
- Information Unit, Department of Health and Environmental Sciences, Helena, MT 59620
- Environmental Information Center, P. O. Box 1184, Helena, MT 59624
- Montana Historical Society, 225 N. Roberts, Helena, MT 59620
- Mark Niebur, P. O. Box 753, Malta, MT 59538
- James Nordlund, Superintendent of Malta Public Schools, Courthouse, Malta, MT 59538
- Kenneth Ulrich, Phillips County Airport Commission, Courthouse, Malta, MT 59538
- Gene Seel, Chamber of Commerce, Malta, MT 59538
- Dale Krause, Soil Conservation Service, 110 S. 1st W., Malta, MT 59538

RE: Marian Hills Estates Subdivision  
Phillips County

Ladies and Gentlemen:

The enclosed preliminary environmental review has been prepared for Marian Hills Estates Subdivision in Phillips County and is submitted for your consideration. Questions and comments will be

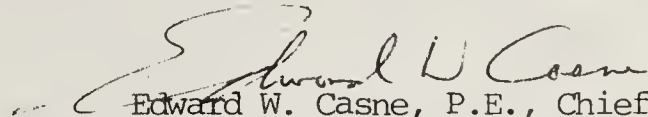




Page 2  
Marian Hills Estates Subdivision  
Phillips County

accepted until April 23, 1982. One extension of time not to exceed seven days will be granted upon request if there is sufficient reason for the request. All comments should be sent to the undersigned.

Sincerely,

A handwritten signature in cursive script, appearing to read "Edward W. Casne".

Edward W. Casne, P.E., Chief  
Subdivision Bureau  
Environmental Sciences Division

EWC/JCM/jjg

Enclosure



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## POTENTIAL IMPACTS ON HUMAN ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Social structures and mores				X		
2. Cultural uniqueness and diversity				X		
3. Local and state tax base & tax revenue		X				*
4. Agricultural or industrial production		X				*
5. Human health				X		
6. Quantity and distribution of community and personal income			X			*
7. Access to and quality of recreational and wilderness activities		X				*
8. Quantity and distribution of employment				X		
9. Distribution and density of population and housing		X				*
10. Demands for government services		X				*
11. Industrial & commercial activity			X			*
12. Demands for energy		X				*
13. Locally adopted environmental plans & goals				X		*
14. Transportation networks & traffic flows			X			*

Other groups or agencies contacted or which may have overlapping jurisdiction Water Quality Bureau, Department of Health and Env. Sciences; Phillips County Health Department; Phillips County Planning Board; Phillips County Commissioners

Individuals or groups contributing to this PER. Christian, Spring, Sielbach and Associates; Mark Niebur; Montana Historical Society; Planning Board, Commissioners, Sheriff, School Superintendent, Chamber of Commerce, Airport Commission, Phillips County

Recommendation concerning preparation of EIS Recommend against preparation of an Environmental Impact Statement

PER Prepared by: James C. McCauley

Date: March 19, 1982



DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES  
Cogswell Building, Helena, Montana 59601  
(406)449-3946

PRELIMINARY ENVIRONMENTAL REVIEW

Division/Bureau Environmental Sciences Division - Subdivision Bureau

Project or Application Marian Hills Estates Subdivision

Description of Project This subdivision is proposed for an area approximately

1/2 mile southwest of Malta, Phillips County, on U. S. Highway 191. It lies

within the E 1/2 of Section 24, T 30 N, R 29 E and W 1/2 of Section 19, T 30 N,

R 30 E, P.M.M. The master plan as submitted will consist of 178 lots, consisting

of single and multiple family residential units and a possible commercial lot.

A golf course is located within the site and is presently under construction.

The first Phase of construction will involve 69 single family lots, 3 multiple

family lots and a commercial lot. A central water supply will be provided for  
the subdivision and golf course, while sewage disposal will be individual on-site  
subsurface systems.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Terrestrial & aquatic life and habitats			X			*
2. Water quality, quantity and distribution			X			*
3. Geology & soil quality, stability and moisture			X			*
4. Vegetation cover, quant- ity and quality			X			*
5. Aesthetics			X			*
6. Air quality			X			*
7. Unique, endangered, fragile, or limited environmental resources				X		*
8. Demands on environmen- tal resources of land, water, air & energy		X				*
9. Historical and archaeo- logical sites					X	*

## POTENTIAL IMPACT ON THE PHYSICAL ENVIRONMENT

### 1. Terrestrial and Aquatic Life and Habitats

The initial phase of Marian Hills Estates incorporates an area of approximately 152 acres. The subdivision is bordered to the south and east by Highway 191 and surrounding farmland, to the north by the Malta Airport and to the west by the Dodson South Canal.

Wildlife present on the site consists of small mammals. Due to the subdivision's proximity to Malta and the airport, the presence of wildlife is very limited. There are no perennial streams within the project boundaries.

### 2. Water Quality, Quantity and Distribution

According to a water system design submitted to this Department by Robert McClurg of Christian, Spring, Sielbach and Associates (CSSA), a central water system will be constructed to supply domestic needs.

It is estimated that Phase I construction will require 148,000 gallons per day average water consumption. Peak instantaneous demands could be as high as 309 gpm. The system design will provide for two wells of 500 gpm and 1000 gpm capacity. 150,000 gallons of ground level storage will be provided and fed through the system by dual 300 gpm booster pumps. This system should provide ample supply and pressure for Phase I.

The completion of the master planned area may require water quantities as great as 270,000 gpd and 550 gpm instantaneous but these amounts should be readily met. Any modification or expansion of the original system must receive approval of the Department of Health and Environmental Sciences (DHES).

The quality of water obtained at Marian Hills Estates should be similar to that of Malta's water supply according to the Environmental Impact Assessment prepared by Christian, Spring, Sielbach and Associates. Samples will be taken from the water supply system prior to approval.

The operation and maintenance of the water supply system will be accomplished by the Marian Hills Homeowners and Water Users Association, Inc. A certified operator will be employed to operate and perform routine maintenance on the system.

Proper control of stormwater runoff will alleviate erosion and subsequent stream degradation. Erosion control measures during construction of roads and residences are necessary. Stormwater will be channeled into ponds and onto the golf course which will act as a buffer to prevent impact from intense storms upon the Dodson South Canal and Milk River. This area is beyond the boundaries of the 100 year floodplain.

The effect of subsurface sewage disposal within the confines of Marian Hills Estates should not have detrimental effects on groundwater

or surface water supplies. Soil characteristics and subsurface hydrology indicate the area is well suited to individual septic tanks and absorption fields.

### 3. Geology and Soil Quality, Stability and Moisture

According to the latest soil survey provided by the U. S. Soil Conservation Service (SCS), there are two classifications of soil within the confines of Marian Hills Estates. The Evanston-Kevin complex comprises the majority of land area with a small amount of Kevin-Scobey complex present.

The Evanston Series is rated as having moderate limitations with respect to absorption fields, dwelling and road construction. It has moderate shrink-swell and frost-action characteristics, with bedrock and groundwater depth greater than 60 inches.

The Kevin Series has moderate limitations for dwelling construction and severe limitations for absorption fields and road construction. The severe limitations are due to slow percolation and low strength respectively. Other characteristics are similar to the Evanston Series.

The Scobey Series is very similar to the Kevin Series as to its limitations for absorption field, dwelling and road construction.

Site specific investigations have been made to determine what portions of the property are best suited to proposed usages. Therefore, problems should not be encountered as long as caution is exercised with respect to roadbed, foundation and sewage disposal site location.

### 4. Vegetation Cover, Quantity and Quality

Most of the 240 acre tract is presently under cultivation. The area along Dodson South Canal has Willow, Russian Olive, Buffalo Berry and wild roses. Grasses include water, reed-canary, brome and alfalfa.

### 5. Aesthetics

The development of the golf course and subsequent revegetation should provide for attractive surroundings. Restrictive covenants will be adopted to control the appearance and maintenance of structures.

### 6. Air Quality

There are not known air pollution problems in the vicinity of the proposed development. Initially, road surfaces will be gravel. This factor could bring about a fugitive dust problem depending on the amount of road, the average speed of vehicles, and the amount of traffic.



## 8. Demands on Environmental Resources of Land, Water, Air and Energy

Subdivisions of a semi-rural nature require more energy and materials than urban expansion due to lower density and required extension of roads and utilities.

If approved plans for water supply, sewage disposal, storm runoff control and solid waste disposal are not followed, water quality may be adversely affected. There will be a quantitative demand on the existing water aquifer for domestic and irrigation purposes. In turn, aquifers nearer the surface will be replenished through disposal of sewage effluent and irrigation. Dust from unpaved roads and fireplace smoke generated by residents could damage local air quality.

Otherwise, there will be a substantial demand for gas, electricity, and building materials as with any other major subdivision.

See additional comments under items no. 2 and 6 of Potential Impact on Physical Environment.

## 9. Historical and Archeological Sites

The presence of historical or archeological sites is unknown. In a letter dated October 15, 1981, Marcella Sherfy of the Montana Historical Society indicates several sites have been located nearby. She suggests that the developer contact the University of North Dakota for more information about the area. The university is conducting a cultural resource survey for a Western Area Power Administration transmission line in proximity to the proposed subdivision.

## POTENTIAL IMPACTS ON HUMAN ENVIRONMENT

### 3. Local and State Tax Base and Tax Revenue

An increase in taxes will result from reclassification from agricultural to residential usage. According to the Environmental Impact Assessment prepared by CSSA, the entire tract currently generates only \$275 per year in taxes. Estimated property tax after development of a typical house as proposed would be about \$550 or \$427 for a lot only. This would result in a gross tax revenue of approximately \$39,600 for Phase I alone.

The overall increase in taxes will not be felt until substantial development has occurred. Therefore, residential developments do not often generate enough revenue to support the services they require initially. However, since a golf course is presently under construction, it will generate taxes prior to impact felt from housing.

4. Agricultural or Industrial Production

As previously mentioned, this tract is currently used for agricultural purposes. Development of residential units will remove good farm land from production. As with similar subdivision developments throughout this state, the conflict between suburban use and agricultural use is ever present. Often, individuals have expressed opposition to the use of prime farm and ranch land for housing pruposes.

We are not aware of any expressed opposition to this development. Its proximity to the Town of Malta, the airport and a drive-in theatre makes it a natural extension of suburban growth.

6. Quantity and Distribution of Community and Personal Income

Steady growth due to energy related mineral resources may be anticipated. Both community and personal income should increase in the future. Any impact upon the tax base or central business district should be considered positive.

7. Access to and Quality of Recreational and Wilderness Activities

Recreational facilities presently unavailable will be provided by the golf course. There will be 9.77 acres of dedicated parkland provided by the subdivision. Possible development of a running track and ballfields has been discussed with school officials.

9. Distribution and Density of Population and Housing

The subdivision as now proposed will contain 178 lots intended for single and multiple-family housing units. One lot may be a future commercial site. A clubhouse and swimming pool are part of future planning.

First phase construction is to consist of facilities for 72 lots. Approval of this subdivision will ultimately result in an increase of population and housing density in the localized area.

10. Demands for Government Services

As with any new subdivision, additional burdens will be placed upon local services due to an increase in population within the immediate area of the subdivision. It is hoped that an increase in tax revenue will offset the need for additional services.

Police protection of Marian Hills Estates would be provided by the Phillips County Sheriff's Department. The sheriff, Mike Camp, made the following comments in response to questions regarding services:

Describe the services available through your office to the residents of the proposed subdivision including the number of personnel and number of vehicles or type of facilities.

This office has four sworn law enforcement officers and four vehicles.

Can the needs of the proposed subdivision be met by present personnel and facilities?

- a. If not, what additional expense would be necessary to make these services adequate?
- b. At whose expense would the necessary improvements be made?

Unknown, probably not.

- a. Wages for more manpower.
- b. Phillips county taxpayers.

Since there is not a fire district in the area of the subdivision, no system of fire protection is planned at this time.

Volunteer ambulance service is available in the Malta area. Phillips county has one hospital and two clinics with one doctor per clinic.

James C. Nordlund, superintendent of Malta Public Schools, had the following comments:

"I am writing in support of Mark Niebur's golf course and residential development.

The Malta Public Schools have experienced declining enrollments for the past ten years. This Niebur project should be a real asset to our school and community. We currently have three school busses that operate in that area - namely South Wagner, Zortman and South Malta. I see no problem in serving students from this development.

This past year, I recruited thirteen professional staff members for Malta's teaching corps. There is a need for acceptable housing in Malta and in addition the recreational aspect - golf, racquet ball courts, etc. would really be a help in attracting teachers to our community.

I have been working with Mr. Niebur on a potential 400 meter eight lane regulation running track as part of the park system for his development. This would be a real addition to our school program. The school district currently has no land to accommodate this needed facility. Our present track is a three lane,



one-fifth of a mile, WPA or CCC project of the F. D. Roosevelt era.

It is my opinion that Mark and Jean Niebur are developing a housing and recreational complex of great value to our community and school system. Their concern for our 400 meter track and apparent plans for the finest of park and recreational facilities indicate that this should be an excellent housing area.

I see no additional expenses for our school system. If there are further questions, please call me. Mr. and Mrs. Niebur have been in almost daily contact with our school since this project started."

#### 11. Industrial and Commercial Activity

The construction of the golf course and clubhouse will have a favorable impact on employment and community income. The Malta Area Chamber of Commerce supports the development and foresees many benefits to the community.

See comments under item no. 6 in Potential Impacts on Human Environment.

#### 12. Demands for Energy

This subdivision can be served by Mountain Bell, Montana-Dakota Utilities Company, Montana Power Company and Malta Cable TV.

See comments under item no. 8 in Potential Impacts on Physical Environment.

#### 13. Locally Adopted Environmental Plans and Goals

The Phillips County Planning Board and County Commissioners approved the subdivision on October 20, 1981. There were no conditions stipulated to be met prior to final platting.

#### 14. Transportation Networks and Traffic Flows

Roads will be constructed to meet or exceed Phillips County Standards for gravel roads according to Mark Niebur, the developer. Roads are to be dedicated to the county and maintained by Phillips County road crews.

It has been estimated by CSSA that the subdivision will generate a total of 2,520 trips per day. Of these, 1,760 will be seen upon the existing street and highway system. U. S. 191 would experience an increase of 1,500 vehicles on the average day or a total traffic volume of 6,000 vehicles per day. This volume would not warrant construction of a 4 lane



highway. However, roadway widening and turn lanes would add a measure of safety. Increased maintenance is not expected.

The subdivision site is adjacent to the Malta Airport. Kenneth Ulrich, secretary of the Phillips County Airport Commission, had two comments relating to Marian Hills Estate:

"That the aviation easement on the approach of Runway 30 be surveyed and obtained from Mark and Jean Neibur prior to the sale of any residential lots affected by said easement;

That the adopted covenants and restrictions which shall run with the land contain a section that recognizes the existing airport facility and the inherent nuisances which may be related to the usual and normal operations of the airport."

